LEVEL	PROCEDURES (policies, technical standards/architectures)	APPLICATIONS (software applications/ components/products)	INFRASTRUCTURE (hardware, comms, networks, services, security)	DATA (formats, protocols, data models, databases)	
4	• **PEO I2 Enterprise Arch compliant with DoD or Joint arch frameworks** • **Enterprise-level** TV-1 • Enterprise Wide CONOPS • DISR • I2 Collaborative Environment (Enterprise wide development methodologies and tools/collaborative environment)	·Common Components (e.g., AAR, SAF, C4I Adapter, Env runtime) • One tool set • Composability/plug and play • Single Runtime Database Implementation • Modeling Support for all Domains • Common GUI/GUI Framework • Complete/Seamless integration of Components with no capability duplication • Integration Processes address all Domains and Applications	• Enterprise wide System Services • Enterprise wide Communications Standards • Enterprise Repository • Family of Product Lines • Enterprise wide Data Distribution Management DDM (e.g., SoSCOE, DIICOE)	• Enterprise wide C2IEDM compliant Battlespace Reference Data Model (OV-2) • Enterprise wide Battlespace Runtime Data Model (SV-11)(e.g., SORD) • Enteprise wide Object Model • Enterprise wide Synthetic Environment Physical Data Model (SV-11) (e.g., .otf) • Enterprise wide Common Data (e.g., MSDL, Ph/Pk data) • Enterprise wide Common Algorithms (e.g., damage assessment/RTCA) • Enterprise wide Meta-Data/Meta-Model • Enterprise wide Data Dictionary	
Enterprise I2/LVC Enterprise wide					
3 **Domain** Individual Live, Virtual or Constructive Product Lines/Domains LT2/ACTF/SE CORE	• Domain Specific within live, virtual, or constructive • Domain Specific TV-1 • Domain/Product Line Architectures (e.g., CTIA, VSA, ACTF/OOS) • Integration process unique to domain • Domain Specific CONOPS (e.g. LT2 CONOPS)	**Domain- specific** Algorithms (RTCA, Env Reasoning) Domain Specific tool sets Domain Specific common components Models (domain specific) **Domain- specific** Integration process	Domain specific DDM Infrastructures (e.g., CTIA/CORBA, OOS SORD) · Product Line development confined (distinct at each domain) Domain Specific Middleware Domain Specific Repositories Domain Specific Services (object mgmt, time mgmt, db services)	Syn Env Logical Data Model (OV-7) Syn Env DBs build from common STF Battlespace Reference Model (C2IEDM) Domain Specific Mil Scenario Def Lang (MSDL) Domain Specific Data Collection Spec (DCS)	

LEVEL	PROCEDURES (policies, technical standards/architectures)	APPLICATIONS (software applications/ components/products)	INFRASTRUCTURE (hardware, comms, networks, services, security)	DATA (formats, protocols, data models, databases)	
		Domain- specific Common GUI/GUI Framework	Instrumentation standards	Domain Specific Object Model (e.g., LROM)	
		Capability overlap limited to Domain	System High	Common data schema formats (e.g. xml)	
		Domain APIs		Domain specific meta-data	
		Domain Comms standards (e.g., 802.11)		Physical Model Data (e.g. target acquisition)	
2 **Functional** Individual Program	Inter-system but not product line	Tool sets (System Specific)	HLA/DIS RTI TENA/TDL	FOM (including COM, MOM, etc.) DIS PDUs System level data models/types	
		Capabilities (System Specific) (e.g., separate AARs)	- Multiple, non standard DDM nfrastructures	Heterogenous data types (see lisi) Databases (System Specific)	
			- Multiple Architectures (Application)	Data Models (System specific)	
			Trusted Guard		
1 **Connected** Sub System		Clearly defined CSCI boundry	Non standard connectivity Swivel Chair Security	SOM Homogeneous data types (email, voice, .gif, etc.)	

4 **Enterprise** I2/LVC Enterprise wide	• **PEO I2 Enterprise Arch compliant with DoD or Joint arch frameworks** • **Enterprise-level** TV-1 • Enterprise Wide CONOPS • DISR • I2 Collaborative Environment (Enterprise wide development methodologies and tools/collaborative environment)	·Common Components (e.g., AAR, SAF, C4I Adapter, Env runtime) • One tool set • Composability/plug and play • Single Runtime Database Implementation • Modeling Support for all Domains • Common GUI/GUI Framework • Complete/Seamless integration of Components with no capability duplication • Integration Processes address all Domains and Applications	• Enterprise wide System Services • Enterprise wide Communications Standards • Enterprise Repository • Family of Product Lines • Enterprise wide Data Distribution Management DDM (e.g., SoSCOE, DIICOE)	• Enterprise wide C2IEDM compliant Battlespace Reference Data Model (OV-2) • Enterprise wide Battlespace Runtime Data Model (SV-11)(e.g., SORD) • Enteprise wide Object Model • Enterprise wide Synthetic Environment Physical Data Model (SV-11) (e.g., .otf) • Enterprise wide Common Data (e.g., MSDL, Ph/Pk data) • Enterprise wide Common Algorithms (e.g., damage assessment/RTCA) • Enterprise wide Meta-Data/Meta-Model • Enterprise wide Data Dictionary
3 **Domain** Iindividual LVC Domains	• Domain Specific Product Line Architectures with Live,Virtual or Constructive (e.g., LT2/CTIA, VSA, ACTF/OOS) • Domain Specific TV-1 • Domain Specific Integration Process • Domain Specific CONOPS (e.g., LT2 CONOPS) • Domain Specific Collaborative Environment (Domain wide development methodologies and tools/collaborative environment)			

COMMENTS	OWNER	CATEGORY	REMARKS
Replace "PEO STRI Wide and external Organizations" with "Local Enterprise Arch compliant with DoD or Joint arch frameworks ~~complete integration no capability overlap~~ **Minumum Redundant functionality or applications across domains**	Makhlouf	Procedures	Changed but changed local to PEO
			The term "Minumum Redundant" is not a measurable term. Recommend keeping no capability overlap unless a measurable definition can be determined for minumum redundant
	Makhlouf	Application	
~~Common~~ **Domain- specific** Algorithms (RTCA, Env Reasoning) ~~, domain specific~~	Makhlouf	Application	Changed
Domain- specific Integration process ~~specific to Domain~~	Makhlouf	Application	Changed
Domain- specific Common GUI/GUI Framework ~~specific to Domain~~	Makhlouf	Application	Changed
Common DDM [don't understand this falling under infrastructure] (SoSCOE, DIICOE)			The Consensus thus far is that it is important to distinquish between DDM that was chosen specificly to meet a domain versus an interprise (i.e.LVC solution)
	Makhlouf	Infrastructure	
MLS [Don't believe that it is automatic or necessary that you have multi level security if you're a level 4]			Agree, More discussion is needed on this subject. It is not clear if the standard for MLS is different between levels of interoperability
	Makhlouf	Infrastructure	

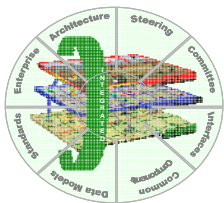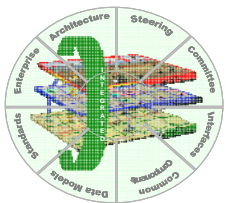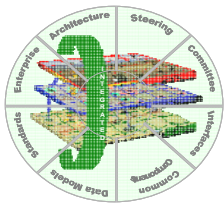|			
Syn Env Physical Data Model (SV-11) (e.g., .otf) **[Common physical and logical models can exist either at an enterprise level or domain level. Recommend deleting this one.]**	Makhlouf	Data	Agree, However is it possible to have aspects of models that are specifiicly design to work at the Domain level (performance) tghat might preclude important features at the Enterprise level. More discussion is needed.
• Battlespace Runtime Data Model (SV-11) **[Let's give recognizable local examples here; I can't come up with one at this moment.]**	Makhlouf	Data	Agree, More discussion is needed
Enterprise Meta-model/Meta-data **[Let's give recognizable local examples here; I can't come up with one at this moment.]**	Makhlouf	Data	Agree, More discussion is needed
Common data that can be shared by applications across domains (e.g. terrain databases, Ph/Pk or vulnerability data, …)	Makhlouf	Data	Included
Common data dictionaries across all PEO's domains.	Makhlouf	Data	Included
Syn Env Logical Data Model (OV-7) **[Common physical and logical models can exist either at an enterprise level or domain level. Recommend deleting this one.]**	Makhlouf	Data	Agree, However is it possible to have aspects of models that are specifiicly design to work at the Domain level (performance) tghat might preclude important features at the Enterprise level. More discussion is needed.
Physical Model Data (e.g. target acquisition)**[Common physical and logical models can exist either at an enterprise level or domain level. Recommend deleting this one.]**	Makhlouf	Data	Agree, However is it possible to have aspects of models that are specifiicly design to work at the Domain level (performance) tghat might preclude important features at the Enterprise level. More discussion is needed.

PEO STRI Interoperability/ Integrated Maturity Model (I2MM)

I2MM LEVEL	PROCEDURES (policies, technical standards/architectures)	APPLICATIONS (software applications/ components/products)	INFRASTRUCTURE (hardware, comms, networks, services, security)	DATA (formats, protocols, data models, databases)
4 **Enterprise** I2/LVC Enterprise wide	• Enterprise Wide Architecture compliant with DoD andr Joint Architecture Policy and Guidance • Enterprise-level TV-1 • Enterprise Wide CONOPS • Enterprise Standards/Components Represented in DoD Information Technology Standards Repository (DISR) • I2 Collaborative Environment (Enterprise wide development methodologies and tools/collaborative environment) • Enterprise Wide Integration Processes address all Domains and Applications	• Enterprise Wide Common Components (e.g., AAR, SAF, C4I Adapter, Env runtime) • Enterprise Wide Common Component Contracts • Enterprise Wide Event Planning and Control Tool Set • Enterprise Wide Component Composability/Plug and Play • Enterprise Wide Common Component Access Methodology • Enteprise Wide Single Runtime Database Implementation • Modeling Support for all Domains • Enterprise Wide Common GUI/GUI Framework • Enterprise Wide Integration of Components with no capability duplication	• Enterprise Wide System Services • Enterprise Wide Communications Standards (e.g., 802.11) • Enterprise Repository • Family of Product Lines • Enterprise Wide Software Infrastructure (e.g., Time Mgmt, Object Mgmt, DDM) • Enterprise Wide Common Service APIs	• Enterprise Wide C2IEDM compliant Battlespace Reference Data Model (OV-2) • Enterprise Wide Battlespace Runtime Data Model (SV-11)(e.g., SORD) • Enterprise Wide Object Model • Enterprise Wide Synthetic Environment Physical Data Model (SV-11) • Enterprise Wide Synthetic Environment Runtime Data Format (e.g., ".otf) • Enterprise Wide Common Data (e.g., MSDL, Ph/Pk data) • Enterprise Wide Common Algorithms (e.g., damage assessment/RTCA) • Enterprise Wide Meta-Data/Meta-Model • Enterprise Wide Data Dictionary
3 **Domain** Individual LVC Domains	• Domain Wide Product Line Architectures with Live,Virtual or Constructive (e.g., LT2/CTIA, VSA, ACTF/OOS) • Domain Wide TV-1 • Domain Wide Integration Process • Domain Wide CONOPS (e.g., LT2 CONOPS) • Domain Wide Collaborative Environment (Domain wide development methodologies and tools/collaborative environment)	• Domain Wide Common Components (e.g., AAR, SAF, C4I Adapter, Env runtime) • Domain Wide Common Component Contracts • Domain Wide Event Planning and Control Tool Set • Domain Wide Component Composability/Plug and Play • Domain Wide Common Component Access Methodology • Domain Wide Single Runtime Database Implementation • Modeling Support for all Domains • Domain Wide Common GUI/GUI Framework • Domain Wide Integration of Components with no capability duplication	• Domain Wide System Services • Domain Wide Communications Standards (e.g., 802.11) • Domain Repository • Domain Product Lines • Domain Wide Instrumentation Standards (e.g., Miles, OneTESS) • Domain Wide Software Infrastructure (e.g., Time Mgmt, Object Mgmt, DDM) • Domain Wide Common Service APIs	• Domain Wide C2IEDM compliant Battlespace Reference Data Model (OV-2) • Domain Wide Battlespace Runtime Data Model (SV-11)(e.g., SORD) • Domain Wide Object Model • Domain Wide Synthetic Environment Physical Data Model (SV-11) • Domain Wide Synthetic Environment Runtime Data Format (e.g., ".otf) • Domain Wide Common Data (e.g., MSDL, Ph/Pk data) • Domain Wide Common Algorithms (e.g., damage assessment/RTCA) • Domain Wide Meta-Data/Meta-Model • Domain Wide Data Dictionary

PEO STRI Interoperability/
Integrated Maturity Model (I2MM)

Level				
2 **Functional** Individual Programs/Systems	• Individual System Architectures within the Domains • Individual System TV-1 • Individual System Integration Process • Defined Event Integration Process • Individual System CONOPS (e.g., NTC-IS, WARSIM) • Individual System Collaborative Environment	• System Specific Components (e.g., AAR, SAF, C4I Adapter, Env runtime) • System Specific Component Contracts • System Specific Event Planning and Control Tool Set • System Specific Component Composability/Plug and Play • System Specific Component Access Methodology • System Specific Runtime Database Implementation • System Specific Modeling Support • System Specific GUI/GUI Framework • System Wide Integration of Components with no capability duplication	• System Specific System Services • Interoperability Services via HLA/DIS/TENA or other Non-Standard • System Specific Communications Standards (e.g., 802.11) • System Specific Repository • System Specific Instrumentation Standards (e.g., Miles, OneTESS) • System Specific Software Infrastructure (e.g., Time Mgmt, Object Mgmt, DDM) • System Specific Service APIs	• System Specific (potentially non-standard) Battlespace Reference Data Model (OV-2) • System Specifice Battlespace Runtime Data Model (SV-11)(e.g., SORD) • System Specific Object Model • System Specific Simulation Object Model (SOM) • SOM correlated to Federation Object Model (FOM) • DIS PDUs with Potential System Specific Extensions • System Specific Synthetic Environment Physical Data Model (SV-11) • System Specific Synthetic Environment Runtime Data Format (e.g., ".otf) • System Specific Data (e.g., MSDL, Ph/Pk data) • System Specific Algorithms (e.g., damage assessment/RTCA) • System Specific Meta-Data/Meta-Model • System Specific Data Dictionary
1 **Connected** Individual Programs/Systems/Subsystems	• Individual Subsystem Architectures within the System • Subsystem Variable/Non-Standard TV-1 • Subsystem Variable/Non-Standard Integration Process • Non-Standard Event Integration Process • Subsystem Variable/Non-Standard CONOPS • Subsystem Variable/Non-Standard Development/Collaborative Environment	• Subsystem Variable/Non-Standard Components • Subsystem Variable/Non-Standard Component Contracts • Subsystem Unique/Non-Standard Event Planning and Control Tools • Limited/No System/Subsystem Composability/Plug and Play • Subsystem Variable/Non-Standard Component Access Methodology • Subsystem Variable/Non-Standard Runtime Database Implementation • Subsystem Variable/Non-Standard Modeling Support • Subsystem Variable/Non-Standard GUI/GUI Framework • Subsystem/Non-Standard Integration of Components with some Duplication	• Subsystem Variable/Non-standard System Services • Subsystem Variable/Non-standard Interoperability Services • Subsystem Variable/Non-standard Communications Standards • Subsystem Variable/Non-standard Repository • Subsystem Variable/Non-standard Instrumentation • Subsystem Variable/Non-standard Software Infrastructure • Subsystem Variable/Non-standard Service APIs	• Subsystem Variable/Non-standard Battlespace Reference Data Model (OV-2) • Subsystem Variable/Non-standard Battlespace Runtime Data Model (SV-11)(e.g., SORD) • Subsystem Variable/Non-standard Object Model • Subsystem Variable/Non-standard Synthetic Environment Physical Data Model (SV-11) • Subsystem Variable/Non-standard Synthetic Environment Runtime Data Format (e.g., ".otf) • Subsystem Variable/Non-standard Data (e.g., MSDL, Ph/Pk data) • Subsystem Variable/Non-standard Algorithms (e.g., damage assessment/RTCA) • Subsystem Variable/Non-standard Meta-Data/Meta-Model • Subsystem Variable/Non-standard Data Dictionary

PEO STRI Interoperability/ Integrated Maturity Model (I2MM)

| 0
 Non Connected
 Stand Alone Programs/Systems/Subsystems | • Poorly Defined/Undefined Architectures within the System
 • Poorly Defined/Undefined TV-1
 • Poorly Defined/Undefined Integration Process
 • Poorly Defined/Undefined Event Integration Process
 • Poorly Defined/Undefined CONOPS
 • Poorly Defined/Undefined Development/Collaborative Environment | • Poorly Defined/Undefined Components
 • Poorly Defined/Undefined Component Contracts
 • Poorly Defined/UndefinedEvent Planning and Control Tools
 • No System/Subsystem Composability/Plug and Play
 • Poorly Defined/Undefined Component Access Methodology
 • Poorly Defined/Undefined Runtime Database Implementation
 • Subsystem Variable/Non-Standard Modeling Support
 • Poorly Defined/Undefined GUI/GUI Framework
 • Poorly Defined/Undefined Integration of Components with Duplication | • Poorly Defined/Undefined System Services
 • Poorly Defined/Undefined Interoperability Services
 • Poorly Defined/Undefined Communications Standards
 • Poorly Defined/Undefined Repository
 • Poorly Defined/Undefined Instrumentation
 • Poorly Defined/Undefined Software Infrastructure
 • Poorly Defined/Undefined Service APIs | • Poorly Defined/Undefined Battlespace Reference Data Model (OV-2)
 • Poorly Defined/Undefined Battlespace Runtime Data Model (SV-11)
 • Poorly Defined/Undefined Object Model
 • Poorly Defined/Undefined Synthetic Environment Physical Data Model (SV-11)
 • Poorly Defined/Undefined Synthetic Environment Runtime Data Format (e.g., ".otf)
 • Poorly Defined/Undefined Data (e.g., MSDL, Ph/Pk data)
 • Poorly Defined/Undefined Algorithms (e.g., damage assessment/RTCA)
 • Poorly Defined/Undefined Meta-Data/Meta-Model
 • Poorly Defined/Undefined Data Dictionary |